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#10

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/811,648 03/05/97 KIKINIS

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EXAMINER

LMC1/0602

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ART UNIT

PAPER NUMBER

2756

DATE MAILED:

06/02/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/811,648

Applicant(s)

Dan Kikinis

Examiner

William. C. Vaughn, Jr.

Group Art Unit

2756

☒ Responsive to communication(s) filed on Mar 22, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-12 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. This Action is in response to the Reply and Amendment received 22 March 2000.
2. The application has been examined. **Original claims 1-4 as well as newly added claims 5-12** are pending. The objections and rejections cited are as stated below:

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, U.S. Patent No. 5,940,387.

5. Regarding **claim 1**, Humpleman discloses the invention substantially as claimed.

Humpleman discloses *a multimedia data distribution system, comprising: a distribution system distributing and delivering public network protocol signals to the level of an individual asymmetric star home network bus* (Humpleman teaches a switching hub that enables special treatment for heavily asymmetric traffic, e.g. compressed digital video and internet data by directly routing these cases from transmitter to receiver), [Fig. 1, Col. 5, lines 42-67 and Col. 6, lines 1-27, and a bridge adapter unit connected to the distribution system and to the asymmetric

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star wiring home network bus (Humpleman teaches that the system allows for local peripheral network that can be connected by a gateway to the internal network for interoperability), [Col. 4, lines 20-26] *and a converter connected to the asymmetric star wiring home network bus and having an outlet for connecting conventional single media and multimedia electronic devices* [Col. 3, lines 60-66] *and wherein the bridge adapter unit translates between the public protocol and the Local Area Network (LAN) protocol using hi-frequency, modulated network signals on the asymmetric star wiring home network bus, and to manage the asymmetric wiring home network bus a non-isochronous type bus (well known), and the converter converts the hi-frequency, modulated network signals on the asymmetric star wiring home network bus to a form required by one of the single media and multimedia electronic devices* (Humpleman teaches that the network connects the digital video, digital audio, computer and telephone equipment together internally into the home, which unifies communication and control within the home, making the full power of the external network connections or internal data sources available to any terminal on the network. As can be understood that this allows for the conversion and translation of different types of equipment network together within the home. Humpleman also teaches hi speed network traffic such as compressed digital video and internet data being routing to and from the transmitter and receive. Humpleman also teaches another feature that allows for an asymmetrically wired home to a form required by one of the single media devices and that is having the set-top electronic device examine the addresses of the data packets it receives and perform a routing function for data that is not meant for this set-top electronics), [Col. 3,

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lines 5-65 and Col. 5, lines 42-67]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that the utilization of a gateway allows for translation as well as conversion of hi-frequency signals within an asymmetric star wiring home network. By this rationale **claim 1** is rejected.

6. Regarding **claim 2**, Humpleman discloses *the single and multimedia electronic devices include telephones, personal computers, fax machines, and televisions running through set top boxes* [Col. 3, lines 5-17]. By this rationale **claim 2** is rejected.

7. **Claim 3** is substantially the same as **claim 1** and is thus rejected for reasons similar to those in rejecting **claim 1**.

8. **Claim 4** is substantially the same as **claim 2** and is thus rejected for reasons similar to those in rejecting **claim 2**.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Corley et al. (Corley), U.S. Patent No. 5,838,683 in view of Humpleman, U.S. Patent No. 5,940,387.

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11. Regarding **claim 1**, Corley discloses the invention substantially as claimed. Corley discloses *a multimedia data distribution system, comprising a distribution system distributing and delivering public protocol signals to the level of an individual home network bus* (Corley teaches an interactive multimedia system that employs a central and peripheral hubs that function to provide services to a plurality of clients of a call manager server), [Abstract], *and a micro-PBX connected to the distribution system and to the tree-type wiring home network bus* (Corley teaches that existing private branch exchange (PBX) and LAN topologies are based upon client-server architecture and isochronous networks. He later states that the ISOBridge hub (180) is typically used in work-at-home applications wherein an end station is communicating via a fax/modem or ISDN BRI interface through an Isochronous WAN into a packet-based Ethernet and it is also well known in the art that within a PBX system at normally connects between twenty or mor station sets to one another, within a public network), [Fig. 1, item 180, Col. 2, lines 39-42, Col. 8, lines 1-65, Col. 9, lines 12-42 and Col. 21, lines 7-16] and *wherein the bridge adapter unit translates between the public network protocol and a Local Area Network (LAN) protocol using hi-frequency, modulated network signals on the home network bus, and to manage the home network bus as a carrier of multiple access points type bus* (Corley teaches that the signaling for circuit and cell switching is best defined by the ISDN signaling standards which include the Carrier Sense Multiple Access with Collision Detection. He also teaches a message translator section (250) that provides the interface between the protocols foreign to the multimedia manager and the multimedia manager internal protocol), [Col. 23, lines 14-39] and a non-isochronous type

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bus [Col. 23, lines 51-56], (this feature is also well known see **Worsley**, U.S. Patent No. 5,594,734, Col. 4, lines 53-67 and Col. 5, lines 1-54). However, he does not explicitly state a converter connected to an outlet. Accordingly, one having ordinary skill in the art at the time the invention was made could have utilized the ISOBridge Hub as a means for converting the home network bus to be adapted for the different signals coming in and out. Since Corley suggests that the ISOBridge performs the conversion of data and IDLC data to and from Ethernet packets (Col. 21, lines 12-16) *and the converter converts the hi-frequency, modulated network signals on the home network bus to a form required by one of the single media and multimedia electronic devices* (Corley also teaches whereas an ATM interface provides the ATM adaption process to convert between an ATM cell and a non-ATM cell. In addition to the conversion of ATM cell, it would have been obvious to one of ordinary skill in the art to have realize that since the ISOBridge Hub is used in an work-at-home application environment it would have been necessary for the Hub to have been able to convert the signals from the home network bus [Col. 21, lines 12-16 and Col. 24-33]. In addition to the above, Corley does not explicitly disclose the distribution system being connected based upon a asymmetric star wiring.

12. In the same field of endeavor, Humpleman discloses in an analogous art a home multimedia network architecture. Humpleman discloses a *distribution system being connected based upon asymmetric star wiring*, [Col. 5, lines 42-67 and Col. 6, lines 12-27].

13. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Humpleman's home multimedia network architecture

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system with the system of Corley, for the purpose of providing interconnectivity to products in a home and to external networks in a relatively inexpensive manner and which also provides the homeowner with the opportunity to select from a variety of different services. By this rationale **claim 1** is rejected.

14. Regarding **claim 2**, Corley-Humpleman discloses *the single and multimedia electronic devices include telephones (127), personal computers (125), fax machines* (It would have been obvious to one of ordinary skill in the art to have utilized the telephone hub for the purpose of a fax machine), *and televisions running through set top boxes* (The suggestion in Corley of a multimedia PC (125) including a video camera (126) would allow for the use of a television as a means for projected the video camera data). By this rationale **claim 2** is rejected.

15. **Claim 3** is substantially the same as **claim 1** and is thus rejected for reasons similar to those in rejecting **claim 1**.

16. **Claim 4** is substantially the same as **claim 2** and is thus rejected for reasons similar to those in rejecting **claim 2**.

17. Examiner would like to address applicant's main point of contention. Applicant argues that there is no need for point to point wiring as shown in the references. Examiner would like to direct applicant to Column 14, lines 30-36, where Corley teaches that the connectivity services resources selected from the group consisting of, but not limited to: (1) point-to-point, (2) point-to-multipoint, (3) multipoint-to-multipoint. So in fact Corley does provide the motivation for an asymmetrically wired connection to be utilized.

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Response to Arguments

18. Applicant's arguments and amendments filed on 22 March 2000 have been carefully considered but they are not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention.

a. Applicant states that the Applicants' invention has the ability to receive the public network protocol signals, translate the signals to the hi-frequency modulated signals on the existing telephone wiring, and then convert the hi-frequency modulated signals to a form required by one of the single or multi-media devices on the network bus, therefore negating the use of a hub type structure. Last, Applicant also states that the asymmetry in the invention pertains to the fact, that the hub has only one port to the network as opposed to Humpleman or Corley.

19. It is the Examiner's position that a prima facie case of anticipation and obviousness were made in Paper 9. It is the Examiner's position that Corley-Humpleman in combination do in fact teach the applicant's claimed invention. Examiner asserts that Corley teaches a system in which translation or bridging among standards is handled in the multimedia hub. And that a message translation section provides an interface between the protocols foreign to the multimedia manager and the multimedia manager internal protocol. Also Corley provides motivation for a hub to be use as a bridging adapter by stating that the hub actually bridges the different protocol messages .

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[see **Corley**, Col. 20, lines 10-24, Col. 23, lines 14-25]. Applicant states that his structure negates the use of a hub structure [see paper 10, page 7] and then states that the asymmetry in applicant's invention pertains to the fact, that the hub has only ONE port to the network [see paper 10, page 8]. This is quite confusing that the Applicant states at first that his invention negates a hub type structure and then states that his invention is a hub. With regards to applicant's statement that the hub has only one port to the network. This particular statement is not commissary with the scope of the claims, since no where in the claim language does it state this feature. No patentable weight will be given to this feature.

20. With regards to Applicant's assertion that Humpleman does not teach a asymmetry type hub. In is clear to the Examiner, that Humpleman teaches a system that allows for communication with the outside world through a number of separate network interface units that also may be combined physically in an entrance unit (bridging adapter) with each network interface unit permitting a connection between a different external network and the home network. The external networks may carry different types of signals These signals may be broadcast signals carried on hybrid fiber coax cable, ISDN broadcast/digital satellite service, FTTC, FTTH, ADSL,. With regards to Figure 1, in which it teaches a system that has a network interface for different protocols such as HFC/Cable (in which it is well known that cable (CATV) networks is basically "asymmetric". So one of ordinary skill in the networking art would have understand that the interface unit of Humpleman could be use to provide the proper interface for a asymmetrically wired network, since the system does teach cable as well as ADSL signaling [see **Humpleman**,

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Fig. 1, Col. 1, lines 18-32, 53-63]. Humpleman also teaches that the switched hub (bridging adapter) enables special treatment for heavily asymmetric traffic, e.g., compressed digital video and internet data by directly routing these cases from the transmitter to receiver [see **Humpleman**, Col. 5, lines 48-50]. In essence, it teaches that the all traffic primarily goes into the switching hub and is then translated or converted to the particular protocol that is being utilized.

Claim Rejections - 35 USC § 103

21. **Claims 5-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Corley-Humpleman as applied to claims 1-4 above, and further in view of Timm et al. (Timm), U.S. Patent No. 6,055,268.

22. Regarding **independent claims 5, 7, and 10**, Corley-Humpleman discloses the invention substantially as claimed (e.g. as in exemplary **independent claim 7**) discloses delivering public network protocol signals to the level of a home or business [see **Humpleman**, Col. 3, lines 5-31] and connecting addressable clients to the internal network (**Official Notice** is taken (see MPEP 2144.03)) and sending data from the public network to the bridge unit. However, Corley-Humpleman do not explicitly discloses imposing a configurable bridge unit at the home or business between the public network and an internal network of the home or business, the bridge unit transferring data between the public and internal network and using at least a portion of the data to configure addresses for the clients.

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23. In the same field of endeavor, Timm discloses in an analogous art multimode digital modem. Timm discloses a configurable bridge unit at the home or business between the public network and an internal network of the home or business, the bridge unit transferring data between the public and internal network and using at least a portion of the data to configure addresses for the clients [Figs. 2a, 2b, Col. 9, lines 19-24, Col. 10, lines 45-67, Col. 11, line 1, and Col. 40, lines 19-24].

24. Accordingly, it would have been obvious to one of ordinary skill in the networking art to have incorporated Timm's teaching of multimode digital modems with the teachings of Corley-Humpleman for the purpose of providing a DSL functionality using preselected common circuitry. It is also well known in the networking art for a portion of data to be utilized in configuring the addresses for the clients. This feature is well known with routers, gateways, and bridges.

25. Regarding **dependent claims 6, 8, 9, 11, and 12**, in which it recites features that are common in the networking art as well as being disclosed within the figures of Corley-Humpleman and Timm. In addition to the limitation of storing both data and parameters of the LAN (**Official Notice** is taken (see MPEP 2144.03)), (It would have been obvious to one of ordinary skill in the networking art to have stored data and parameters of a LAN within a local hard disk). By this rationale **dependent claims 6, 8, 9, 11, and 12** are rejected.

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Citation of Pertinent Prior Art

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Way, U.S. Patent No. 5,768,280 discloses a system that teaches that asymmetric wiring is well known in the networking art of CATV [see **Way**, Col. 1, lines 19-20]. See also **Rautiola** et al., U.S. Patent No. 5,949,775 in which it is disclosed a system for integrated office communication for the home and the office [see **Rautiola**, Figs. 2 and 3, Col. 4, lines 35-54, Col. 7, lines 65-67, Col. 8, lines 1-8].

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

a shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Vaughn, Jr. whose telephone number is (703) 306-9129. The examiner can normally be reached on Monday through Friday from 8:00 to 4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehmet Geckil, can be reached on (703) 305-9676. The fax phone number for this Group is (703) 305-9731 (for informal or draft communications, please label "**PROPOSED**" or "**DRAFT**"). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

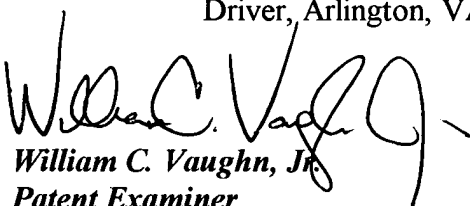
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Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal

Driver, Arlington, VA., Sixth Floor (Receptionist)


William C. Vaughn, Jr.
Patent Examiner
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MEHMET B. GECKIL
PRIMARY EXAMINER

